

C L A I M S :

1. A method for producing a gearwheel from a powder-metal blank which is pressed and sintered with an allowance in the toothing region, with the powder metal blank supported on a mandrel being densified in the region of the allowance by pressing on the counter-toothing of a circular pusher tool engaging in the toothing of the powder metal blank under plastic deformation by the allowance, characterized in that during its densification the powder metal blank is radially clamped on both face sides over the circumference.
2. A method according to claim 1, characterized in that the powder metal blank is axially clamped for radial clamping between two pressure rings.
3. An apparatus for performing the method according to claim 1 or 2, comprising a mandrel for supporting a powder metal blank for a gearwheel to be produced which is sintered and pressed with allowance and at least one pushing tool which engages with a counter-toothing in the toothing of the powder metal blank, characterized in that two pressure rings (8, 9) are provided which are coaxial to the mandrel (1) and axially clamp the powder metal blank (2) between themselves.
4. An apparatus according to claim 3, characterized in that one of the two pressure rings (8, 9) is axially supported relative to the mandrel (1) and the other pressure ring (9) is connected with an axial actuator (10).
5. An apparatus according to claim 3 or 4, characterized in that the pressure rings (8, 9) and/or the powder metal blank (2) comprise axially projecting, circumferential noses (13) for positive-locking connection between the powder metal blank (2) and the pressure rings (8, 9).